IN THE CLAIMS:

Please cancel claims 24-26, and amend the claims as follows:

1.   (Currently Amended):   A method for ~~assembling~~ processing a fragmented packet with a firewalling device, comprising:

receiving fragments of the packet [[to]] prior to processing of firewall policies at the firewalling device;

sorting the fragments according to the packet and order of the fragments;

storing the fragments in association with the packet and in order in a connection table (CT) and a Network Address Translation table (NT);

cross linking the NT and CT by storing a hash of at least a portion of the fragments in one of the NT and CT tables;

reconstitute the packet ~~and~~

collecting and assembling all the fragments in order to fully reconstitute the packet prior to applying firewall policies; and[[.]]

transferring the packet to the firewalling device to apply the firewall policies to the entire packet at one time.

2.   (Currently Amended):   The method, according to claim 1, further comprising:

obtaining source and destination address information for the fragments; and

determining if the source and destination address information of the fragments matches of the other fragments.

3.   (Original):   The method, according to claim 1, further comprising determining if the fragments have a valid checksum.

4.   (Original):   The method, according to claim 1, wherein the sorting comprises obtaining packet and fragment identifiers.

5.   (Original):   The method, according to claim 4, further comprising determining if any of the fragments needed to reconstitute the packet have not been stored.

6.   (Original):   The method, according to claim 5, further comprising determining if the fragments stored collectively exceed a communication length threshold.

7.   (Original):   The method, according to claim 6, further comprising purging the fragments responsive to the communication length threshold being exceeded.

8.   (Original):   The method, according to claim 7, further comprising starting a timer in association with an initial one of the fragments received by the firewalling device.

9.   (Original):   The method, according to claim 8, further comprising checking whether all the fragments needed to reconstitute the packet have not been received to the firewalling device within a threshold time period.

10.   (Original):   The method, according to claim 1, wherein the storing comprises overwriting one of the fragments with a subsequently received fragment.

11.   (Currently Amended):   A ~~method for~~ computer readable medium containing a program which when executed by a processor which assembles ~~assembling~~ a fragmented packet ~~within~~ prior to processing by a stateful firewalling device, comprising:

    obtaining fragments of the packet ~~by the firewalling device~~, each of the fragments having a packet identifier and a fragment identifier, each of the fragments have a source address and a destination address;

    hashing at least a portion of the fragments obtained;

    determining if the source address and the destination address is currently stored in a connection table at the stateful firewall in association with the packet identifier based on the hash;

    reserving buffer memory space and starting a timer responsive to the source address and the destination address not being currently stored;

    responsive to the source address and the destination address being currently stored, determining for each of the fragments subsequently received after receipt of an initial fragment with the packet identifier whether a respective checksum for the fragments subsequently received is valid;

sorting the fragments according to the packet identifier and the fragment identifier; ~~and~~

storing the fragments <u>to reconstitute the packet</u> in the buffer memory space reserved <u>to fully reconstitute the packet including all fragments</u> in association with the packet identifier and in order according to the fragment identifier[[.]]<u>; and</u>

<u>transferring the fully reconstituted packet to the firewalling device to apply firewall policies to the entire fully reconstituted packet at one time.</u>

12.   (Currently Amended):   The ~~method~~ <u>computer readable medium</u>, according to claim 11, further comprising:

determining if all the fragments to reconstitute the packet have been stored; and

reconstituting the packet according using the fragments stored for the packet.

13.   (Currently Amended):   The ~~method~~ <u>computer readable medium</u>, according to claim 12, further comprising determining if any of the fragments needed to reconstitute the packet have not been stored.

14.   (Currently Amended):   The ~~method~~ <u>computer readable medium</u>, according to claim 12, further comprising determining if the fragments stored collectively exceed a communication length threshold.

15.   (Currently Amended):   The ~~method~~ <u>computer readable medium</u>, according to claim 14, further comprising clearing the buffer memory space reserved of any of the fragments responsive to the communication length threshold being exceeded.

16.   (Currently Amended):   The ~~method~~ <u>computer readable medium</u>, according to claim 15, further comprising checking whether all the fragments needed to reconstitute the packet have not been obtained by the firewalling device within a threshold time period.

17.   (Currently Amended):   The ~~method~~ <u>computer readable medium</u>, according to claim 16, further comprising clearing the buffer memory space reserved of any of the fragments responsive to the threshold time period being exceeded.

18.   (Currently Amended):   The ~~method~~ computer readable medium, according to claim 12, wherein the packet is reconstituted prior to interrogation.

19.   (Currently Amended):   The ~~method~~ computer readable medium, according to claim 11, wherein the fragments are physically stored in order within the buffer memory space reserved.

20.   (Currently Amended):   The ~~method~~ computer readable medium, according to claim 11, wherein the fragments are logically stored in order within the buffer memory space reserved.

21.   (Currently Amended):   The ~~method~~ computer readable medium, according to claim 11, wherein the fragments are Internet Protocol version four formatted packets.

22.   (Currently Amended):   An apparatus for assembling fragments prior to processing by a firewalling device in a network processing unit (NPU), comprising:
        first combinatorial logic for receiving a communication configured to: .
                determine status of the communication including identification of fragmented communication units, the fragmented communication units including constituent parts of a unit of communication;
                sort the fragmented communication units according to communication unit and fragment order;
        memory for storing the fragmented communication units as sorted;
        second combinatorial logic to reconstitute the unit of communication in the order stored responsive to obtaining all the fragmented communication units for reconstitution of the unit of communication, and
        a firewalling device for applying firewall policies to the entire reconstituted unit of communication at one time.

23.   (Currently Amended):   A system for assembling fragments prior to processing by a firewalling device in a network processing unit (NPU), comprising:
        a host processing unit;
        system memory coupled to the host processing unit;

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a network interface coupled to the host processing unit, the network interface including a network processing unit, the network processing unit including:

first combinatorial logic for receiving a communication configured to:

determine status of the communication including identification of fragmented communication units, the fragmented communication units including constituent parts of a unit of communication;

sort the fragmented communication units according to communication unit and fragment order;

local memory for storing the fragmented communication units as sorted;

second combinatorial logic to reconstitute the unit of communication in the order stored responsive to obtaining all the fragmented communication units for reconstitution of the unit of communication[[.]]; and

a firewalling device responsive to the second combinational logic for applying firewall policies to the entire reconstituted unit of communication at one time.

24 – 26 (Cancelled)

27. (Currently Amended): An apparatus for assembling fragments prior to transfer to a firewall device, comprising:

first means for receiving a communication, the first means configured to:

determine status of the communication including identification of fragmented communication units, the fragmented communication units including constituent parts of a unit of communication;

sort the fragmented communication units according to communication unit and fragment order;

memory for storing the fragmented communication units as sorted;
second means for reconstituting the unit of communication in the order stored responsive to obtaining all the fragmented communication units for reconstitution of the unit of communication[[.]]

means for transferring the reconstituted unit of communication to the firewalling device; and

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<u>means for applying firewall policies to the entire reconstituted unit of communication at one time.</u>

28.   (New):   The method of claim 1, including storing an Address Research Table (ART) for a first packet of a connection to the firewall device in association with one of the NT and the CT, and the hashing each of the subsequent packets to determine a table entry to forward the packet.

29.   (New):   The method of claim 28, including comparing information from each received packet to the previous received packet before forwarding the packet.

30.   (New):   The method of claim 1, wherein the hash function is based on the incoming packet 5-triple information.

31.   (New):   The method of claim 30, wherein the input to the hash function of the NT index uses public address information.